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U INTRODUCTION.

This REVIEW is based on reports for February, 1891, from 2,302 regular and voluntary observers. These reports are classified as follows: 172 reports from Signal Service stations; 118 reports from United States Army post surgeons; 1,466 monthly reports from state weather service and voluntary observers; 31 reports from Canadian stations; 181 reports through the Central Pacific Railway Company; 334 marine reports through the co-operation of the Hydrographic Office, Navy Department; marine reports through the "New York Herald Weather Service;" monthly reports from the local weather services of Alabama, Arkansas, Colorado, Illinois, Indiana, Iowa Weather and Crop Service, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Meteorological Report of Missouri State Board of Agriculture, Nebraska, Nevada, New England, New Jersey, New York, North Carolina, North and South Dakota, Ohio, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, and Wisconsin, and international simultaneous observations. Trustworthy newspaper extracts and special reports have also been used.

U CHARACTERISTICS OF THE WEATHER FOR FEBRUARY, 1891.

The month was warmer than the average February east of a line traced from Lake Superior to west Texas; to the westward of this line the month was colder than usual. The greatest departure above the average temperature occurred from the lower lake region to the North Carolina coast, where it exceeded 5°, and the most marked departure below the average temperature was noted on the northeast slope of the Rocky Mountains, where it was more than 10°. At Jacksonville, Fla., the month was the warmest, and at Valentine, Nebr., and San Carlos, Ariz., it was the coldest February on record. The highest maximum temperature reported by a regular station of the Signal Service was 97°, at Rio Grande City, Tex., and by a voluntary observer, 99°, at Fort Ringgold, Tex. At a number of stations in the south Atlantic and Gulf states, and at Keokuk, Iowa, and Escanaba, Mich., the maximum temperature was as high or higher than previously reported for February. The lowest minimum temperature reported by a regular station of the Signal Service was -36°, at Fort Custer, Mont., and by voluntary observers, -46°, at Breckenridge and Gunnison, Colo. At Fort Stanton and Santa Fé, N. Mex., and San Diego, Cal., the minimum temperature was the lowest ever reported for February. The cold weather of the 26th and 27th in the Gulf and south Atlantic states injured early fruit and vegetables.

More than double the usual amount of precipitation fell on the middle and south Pacific coasts and over the southern plateau region; in the Missouri Valley, the Ohio Valley and Tennessee, the lower lake region, and the middle Atlantic states the monthly precipitation was about one-half greater, and over the northern plateau, on the northeast slope of the Rocky Mountains, in the upper lake region, and in New England it was about one-fourth greater than the February average. In the lower Rio Grande valley, on the middle-eastern slope of the Rocky Mountains, and at Key West, Fla., less than one-half the usual amount of precipitation fell, and in the west Gulf and south Atlantic states and on the southeast slope of the Rocky Mountains one-half to three-fourths of the average amount for February was reported. In southeast Massachusetts, at Albany, N. Y., and at stations in North Carolina, Georgia, Tennessee, Louisiana, Minnesota, South Dakota, New Mexico,

Arizona, Montana, Colorado, and Oregon the monthly precipitation was the heaviest, and in northeast Florida, and at stations in Arkansas, Texas, Indian Territory, and northwest Washington it was the least ever reported for February. Snowfall of more than 100 inches was reported at Rico, Colo., and Alta, Utah; more than forty inches fell at stations in central New York, south-central and north-central Oregon, and extreme northwest Wyoming, and more than thirty inches fell in northeast Nevada, north-central New Mexico, central Wisconsin, and south Vermont. The heavy rainfall in Louisiana, Tennessee, and the east Gulf states caused serious interruption to farm work. The general and heavy rains of the middle of the month in California ended a serious and long-continued drought in that region.

Destructive floods occurred in Arizona, California, and along the Ohio River and tributaries. Owing to heavy rains the Gila and Colorado rivers and tributaries began to rise on the 15th, the rise reaching Yuma, Ariz., on the 19th. The night of the 21st the water was within four feet of the top of the levee built on the south side of the town to protect it from the overflow of the backwater of the Gila River. The evening of the 22d the levee broke and by 9 p. m. one-half of the town was in ruins. On the 26th, at 8 p. m., the water was above the scale on the gauge at Yuma, and the embankment, which had been repaired, again gave way. On the 27th the water reached 33.2 feet at Yuma, 4 feet 8 inches higher than ever before recorded at that place, and it was probably about 4 inches higher during the night. The loss of private property in Yuma by the flood was estimated at over \$300,000. No trains had arrived or departed from the 22d to the close of the month. The destruction by flood was also very great throughout Arizona and southern California, and freshets occurred in the Sacramento Valley.

On the 1st the Ohio River was rising rapidly at Cincinnati, Ohio, and on the 6th reached 47.9 feet, 2.9 feet above the danger-line, and then commenced to fall. On the 13th and 16th the river again passed the danger-line at Cincinnati. On the 17th the rivers passed the danger-line at Pittsburgh, and at 11 p. m. the Monongahela River stood at 29.9 feet, 7.9 feet above the danger-line. Portions of Allegheny City were flooded and travel on the street railroad between Pittsburgh